HIEPI Technical Infrastructure Workgroup Meeting Minutes

Meeting Owners	Dave Towne (WG Lead) Lee Jones (WG Facilitator)
Minutes Author	Jackie Baldaro (WG Business Analyst)
Version	1

Date	7/14/2010
Time	10am-12pm
Location	Telecon call

AGENDA

Topic: "Considering alternatives and narrowing options"	Led By	Start	End
OPENING REMARKS –Welcome and catch up on new developments from last week	Lee Jones	10:00 AM	10:15 AM
Guided Discussion ❑ Phase 1 components under consideration by all workgroups and clarification of technical infrastructure ❑ Coming to consensus on the Technical elements required for this first phase ❑ Given time we will repeat this for later phase elements	Lee Jones	10:15AM	11:50 AM
Wrap up & Next Steps – Prepare for Next Summit Meeting	Lee Jones	11:50am	12:00pm

ATTENDEES

Name	In Attendance (Y or N)	Name	In Attendance (Y or N)
Brian Richards	Y	Elizabeth Collins	Y
Andrew Watt	N	Mark Nightingale	Y
Bob Bridgham	Y	Sharon Beaty	Y
David Towne, WG Lead	Y	Vinod Brahmapura	N
Frank Catanese	Y	Lee Jones (WG Facilitator)	Y
John Kelly	Y	Jackie Baldaro (WG Business Analyst)	Y

GUESTS

Name	In Attendance (Y or N)
Mark Belanger, MAeHC	Y

* Via telephone

Meeting Summary

The meeting commenced at 10:08am with roll call being taken and a notice that meeting minutes were posted and are available on the HIEPI Google sites for all to view.

Work group welcome and opening remarks included a quick summary of workgroup progress from the previous meeting with a discussion of the previous week's spreadsheet presentation detailing models & options providing images to reinforce conceptual models. A recap of other workgroup activities from last week flowing into goals and objectives for this week was also provided to the group.

The goals for today's meeting are to move towards becoming more specific with our general posture that the group will want to represent regarding state-wide HIE. The group reviewed the current project high-level timeline understanding the Technical Infrastructure Workgroup is little ahead of the other groups discussions by having the opportunity to incorporate what the other groups have done.

An overview was provided of the information provided in slide 4-7 and how the concepts are intended to guide today's work effort.

Slide 4's theme: "Converging on Solutions" was discussed; last week the group looked at the technical implications and straw man prioritization to focus time intention & energy. The group will spend some time understanding the ONC PIN received last Thursday which provides guidance and contains good "food for thought".

Slides 5, 6, 7 will frame and guide the groups discussion as to how we want to posture our technical components. On the State notification slide, we have summarized the salient points and challenges facing us; ONC is being responsive to feedback and making an effort at re-alignment, in other words– there is seed money & effort going towards standing things up but we need to think about future sustainability, specifically, assumptions should not be made that future monies will be available (federally) for subsidy. The states have started to express concern about mandatory clinician participation. The facilitator communicated his feeling that there will be various models and the group will want to leverage current structure in place.

Slide 5: lists Guiding Principles for the work group to digest and discuss.

Slide 7: Today's meeting will focus will be Slide 7 the strategy of meeting meaningful use (MU).
<*Workgroup member*> described a follow-up call with ONC to provide specific comments the state received pursuant to some of these themes. ONC confirmed the PIN is a strong message as to what the state plans should look like. The objective was more of a course correction that there will not be funding to f/u some of the more grandiose plans and to avoid any "throw away" objectives. <*Workgroup member* > reviewed standard components for stage 1 & 2, providing detail for stage 2 components change – adoptive CDA-R2 and ASTM CCR alternatives to be narrowed and suggests to think beyond stage 1. <*Workgroup member*> built a table to send to identify the stage 1 & 2 standards to give us an idea of what to avoid- and if possible, keep in our minds identifying a value proposition for selling HIE in an effort to obtain funds for future sustainability. Member noted that there are lessons to learn from exchanges that are happening now. Bottom Line: to build/create a vision that is affordable & achievable.

The group continued its discussion of Slide 7 communicating a need to focus at a minimum on- eRX, structure lab results & sharing patient care summaries- note to break lab results into 2 categories (order/result with national labs; results from local or hospital labs) - many vendors have pretty robust structure in place already for the first category- the idea should be to integrate rather than create. Regarding sharing of patient care summaries- most direct areas are to address with local networks able to share without contracts across states, e.g. connecting hub-hub.

> **Comment:** Infrastructure out to big labs (quest) most repetition smaller stuff from hospital to PCP/specialist never makes it into the edge/node- will this make it into the infrastructure.

Response: Also in phase 1 priority use case – hosp to pcp/specialist – we do need to consider it in local straw man whether it goes into CCD or something else (HL-7) most labs of that sort are in HL-7). The third bullet is larger than just a summary.
Response: Good point what is being described (slide 7 arrow) should also point to labs (receipt of structured lab results).

This leads us into Finance: once you look at what needs to be covered there is only 1.3 mil 3 years to stand up an HIE- not a lot if you look across states on what is being financed. We have practical constraints about what we really have- we need to prioritize Phase 1 and then we can discuss practically about where the finances will come from.

In the State of NH, an opt-out clause where patients need to elect not to have their information participate under current definition of HIE. We need to be clear about intent of the law.

1. General intention of legislators- we are able to have a federated system of logging to allow those governing the HIE to reconstruct what transpired.
2. When it comes to opt-out this can happen the way it happens currently- consent at the provider office level.
3. One wrinkle is that while it is good to understand legislative intent we need to pay attention to the actual words written into law- if our understanding is challenged in court.

We can start out with a posture taking into consideration the current law and then re: opt-in/out, to facilitate a mechanism to opt-out as a starting posture.

Q: Surescripts has run a query <*in NH*>- 80% are activated to receive through Surescripts.
A: Ok, they do a pretty good job of monitoring that stuff.

The group's attention was then focused on Slide 10, Secure routing among providers, as a first concern to make architecture concrete. The facilitator provided slide details; the left-most column- all are secure routing to providers. Last week the group discussed technical implications about type of provider understanding that no, there are no implications.
The group discussed the fact that they have limited energies for this planning exercise to phase 1, from a tech perspective what does that mean? Today, the group needs to get at another, deeper level of detail.

Slide 12- represents provider-to-provider secure routing elements involved in 2 phases one an expansion of the other. Transaction brokering by existing arch & sub networks by hospitals & independent practitioners- the group discussed that the infrastructure represents a strong portion of the clinicians across NH and can possibly represent those independents that are not represented with perhaps another sub-infrastructure. Essentially, then this would result in some sub- brokering (a routing and relay and service broker facilitating transaction with what they have in place- then they would need to standardize how those transactions happen within state standards) and then within the sub networks themselves they have some way already of getting the information to the edge (infrastructure that we don't want to be terribly intrusive)).

Comment: in the PIN our charge is to facilitate MU - we are making the assumption that ability to make MU is accomplished at the nodes- we need to understand that they do have that capability- we should make a list of assumptions about the read.
Response: Yes, correct, The CIO survey hopefully will show that there is infrastructure in place to take this on. Or if not there's a gap & we will need to build upon the existing – is there some sort of bare bones portal to allow basic functionality to allow those to "get into the game"?.

ACTION ITEM: Need to list our assumptions (e.g. – edge systems can meet MU; local networks cover all providers) and come back to this- WG Analyst will add to action items.

Q: What is the crucial technology required to "link" appropriately? To be recognized as a node?
A: If there is an EHR capable of adhering to state standards then yes, however the question then becomes is it easier to sell EHR vendors on becoming complaint or for the Network to become compliant- which is more efficient to compel?

Comment: we would be hard pressed to compel vendors who sell nationally to comply with NH state requirements. Better to wait and see what national standards are then press those on the vendors
A: Agree, localization is for things like privacy- no national standards as to how you deal <operationalize> with consent

Slide 12 discussion cont…The left side is the initiators- one side transaction moving data from there is no logical response (not a query) a push- this is one view to have the discussion on.
Slide 13- describes the local edge version of the discussion- compressed information into the box on slide 13- boxes on either side provider/organization to initiate a transaction using what they have and their agreed upon local way of transacting. On the edges, governed by local decisions, in the box will be state standards.

1st diagram: Network-to-Network HIE
2nd diagram: Given that the above is in the center, local networks on the edges

For example: There is a hospital system that has all referral partners using something independent (like Epic) Practice EHR and Hospital EHR are connected there would be a way to accommodate a third party that is not Epic. [This network can then be connected to the HIE either by implementing the standards of the HIE, or…], the 2nd is a gateway server that people agree to use

Comment: At a minimum we would dictate standards and node would have to adhere to this and/or there is a standard gateway to stand up that everyone could connect into.
Comment: They have an adapter, an open source that can support other standards if you want it to < *the state*>, private hospitals and VA use that model - open to any source- use NHIN as the grid and every hospital as a node operating through an adapter.
Response: The Model is a government model called NHIN exchange; NHIN connect (the reference implementation)- is available open sourced, based on specifications that NHIN has authored. Anyone could take NHIN Connect as is or take the specs and build something.
NHIN Direct is an effort for that last 5 months for point-to-point push, NHIN Connect mostly facilitates things in a pull model- most people were trying to avoid the pull model they are going to start an open sourced project that we could lift and use.

Comment: Another standard out there, CAQH, is another fairly broadly accepted transport for administrative transactions.

Q: re: Slide 12. The use cases assume one node knows, a one-way transmission, that it is routing only, the middleware validates the payload the sending node knows who it is trying to send to.
A: No, not assuming some validation of the payload, but are assuming some sort of directory service that will know

The group discussed and agreed to spend the remaining meeting time to understand what is needed to come to consensus- actual consensus will be in the face to face next week, today's focus remains on introducing each on the remaining slides.

Slide 14: We are starting with Secure routing as a paradigm for phase 1- a brokered point-to-point transaction
Slide 15- Moves toward structured data <payload> and identify standards to encode them, we looked at C32and CCD document last week w/ a comparison CCR and CCD and other constructs for HITSP- there is some head nodding around CCD (and CCR) are the standards acceptable for phase 1. We have an open question of supporting the Cont. of care record, at a minimum, C32. The third thing we agreed upon- We are agnostic as to what kind of provider it was (agnostic to those types of detail).

Slide 17: (and the next 11 slides) will talk about for whom and to whom, we will use the two levels of diagram from the beginning starting with local hospital talking to < > and moving out to the edge. There are 11 points that we should reach consensus on.

Slide 18: Consensus point #1 Hospital Systems Brokers as Edge System Assumption: hospital systems being brokers to the edge itself.

Comment: We may want to have a vendor that is compliant to state standards to be able to connect directly, there are arguments for & against; the issue is -does this support meaningful use that we will understand from our environmental scan? Lastly, is there a default network, local network, that allows those < *not in a network*> to participate.

Comment: The hospital is not necessarily the one taking the lead in every area, some areas hospital are not the lead org when it comes to technology /EMRs. We have a rural network whose purpose is to develop an HIE with federal dollars already.
Response: Agreed, when we look at each area need to understand that it is not always a hospital system as the leader. The WG Analyst will note.

WG NOTE/ACTION ITEM: Graphics/ diagrams should represent that there are varying technology leaders across the states, not just hospitals systems that need to be represented and queried**.**

Comment: Worried about "forcing" independents into a hospital network, need to be careful here, some systems are sophisticated enough to do it on their own
Response: correct, we will clarify- what is intended to more a pareto analysis to get clinicians engaged not as the rule, edit the slides to reflect options for those
Comment: I feel the words may be strong but the slide diagram illustrates assumption that reflects that those can "play" if they have the systems and can adhere to standards, in place.
Response/Q: Is there an operational question about the state managing thousands of nodes? Just putting it out there for discussion.

In creating a State HIE, we are trying to make it skinny & lean, < *the group is*> proposing that we don't get into the payload details and that it gets federated; facilitate, as a process, some sort of initial credential to update their trust stores, and perhaps best to let HIE maintain trust with each node and will give us options to logging. This is the second consensus point to consider for next week

Slide 20: Consensus point #3- Uses the emerging NHIN direct protocol for brokered pt tot pt directed transactions. There will be pilots over the summer that will be open sourced for others to be able to take from. < *NHIN*> just started and has initial standards for addressing, it will have vendors and hospitals participating (NH could take advantage of compliant vendors). Perhaps state could explore being a pilot.

Q: due to funding issues & ONC PIN will leveraging the infrastructures of neighboring States come back onto the table? Other state HIE in the "middle" not just NHIN Direct?
A: No, they are not off the table…
Comment: We need to be careful not to overstate what NHIN direct is- really the lowest common standards for those who couldn't agree. You under sell the state HIE that we are not capable for doing anything "better" we do not gain a lot by adopting the NHIN standard.
A: the question is more what is going to be endorsed and then the industry will gravitate towards that
Comment: Whatever the industry looks like 3-5 yrs from now, won't look like today, NHIN direct tries to salvage work that people can't complete themselves- there is a lot of vendors out there that can and are doing this not using NHIN standards.
A: Things are so varied- the question is what will be the unifier…
Comment: I don't know of anyone who thinks that NHIN direct is the unifier or robust structured standard- all I suggesting is what is the best thing for NH to do and not to limit that questions to an answer because it came out of Washington.
Response: Understood, we will have the WG analyst note this.

WG NOTE/ACTION ITEM: The workgroup will discuss in more depth all options, not just NHIN.

Slide 21: We can have the end points (nodes) deal with the addressing or allow central HIE to manage addressing, there would need to be a scheme of addressing. Is there a local addressing to employ and if there is. An EHR example, draw from local directory, the middle figures out who it is, then completes transaction- send it on. A directory service centrally and master person index, provider locater services needed.
Slide 22 consensus pt #5: There is no exposure PHI, encrypt everything to the edge and expose addresses- privacy line comes into play; login requirement with patient identity- now we are into NHLAW issue.

Consensus Point #6: HIE can trust local networks and then in tern trust the edge, a network of networks do internal validation. Could have trust end to end that bypasses HIE, if you start off with HIE maintain trust you can go more places more easily from there in the future…

Consensus Point # 7: Implication- we would need to have a certificate authority to issue certificates, state endorsed or sponsored authority…

Consensus Point # 8: NHIN direct supports this paradigm; when you get into a pulling…

> **Comment:** in terms of the value proposition- does it make sense to give serious consideration to "pull" which is more desired? Is pull moving further up the priority sequence? Thinking about investment and sustainability models- pulling seems to be a high valued capability
> **A:** yes, very valid, question is prioritization of use cases- do we want to make this higher up on the priority list.
> **Comment:** in terms of building foundation- if you build something that if not ready to put a repository out there you could at least use a record locator to allow functionality to "ask for it". We will have WG analyst note this.

WG ACTION ITEM: The workgroup will give further consideration to understanding what the market demand/priorities may be concerning services relating to pull transaction vs. push transactions as a value proposition for future funding.

Consensus Point # 9: Whole opt out scenario is falling outside the required consent for treatment purposes
Consensus Point #10: We need to have an acknowledgement of successful transactions
Consensus Point #11 expanded diagram compress into the center box, last consensus pt discussion of how things happen at the edge (red circles –edge transactions).

Slide 32- reminders regarding next session.

Wrap up Comments/Issues/Reminders:
One thing is that people want to enable "pull" from the beginning instead of just "push" in the spirit of looking beyond the here & now. Another thing was that NHIN Direct got some pushback. We'll work it through in summit next week. Diagrams in PPT were taken from the architecture spreadsheet we've been working from.

The work group gave complements to the facilitator on the content achieved at today's meeting.

<u>One final note: While the Consensus points in the slide deck express a solution option, they are not resolutions. That is, all of the straw proposals are still subject to additional comment and analysis before the Workgroup commits to a specific technical solution component.</u>

The meeting closed at 12:06pm